

University of Groningen

Chemoresistance acquisition induces a global shift of expression of angiogenesis-associated genes and increased pro-angiogenic activity in neuroblastoma cells

Michaelis, Martin; Klassert, Denise; Barth, Susanne; Suhan, Tatyana; Breitling, Rainer; Mayer, Bernd; Hinsch, Nora; Doerr, Hans W.; Cinatl, Jaroslav; Cinatl, Jindrich

Published in:
Molecular Cancer

DOI:
[10.1186/1476-4598-8-80](https://doi.org/10.1186/1476-4598-8-80)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2009

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Michaelis, M., Klassert, D., Barth, S., Suhan, T., Breitling, R., Mayer, B., Hinsch, N., Doerr, H. W., Cinatl, J., Cinatl, J., & Cinatl jr., J. (2009). Chemoresistance acquisition induces a global shift of expression of angiogenesis-associated genes and increased pro-angiogenic activity in neuroblastoma cells. *Molecular Cancer*, 8(1), [80]. <https://doi.org/10.1186/1476-4598-8-80>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Additional file 14. The top four PANTHER signalling pathways (taken from www.pantherdb.org) most strongly differentially regulated between non-N-myc amplified neuroblastoma tissues from patients with favourable outcome (no relapse) or poor outcome (relapse of disease). Neuroblastoma gene expression data was obtained from Gene Expression Omnibus (www.ncbi.nlm.nih.gov/geo/; accession number GSE3446; Asgharzadeh et al., J Natl Cancer Inst 2006;98:1193-203).

PANTHER signalling pathway	p-value
1. Wnt signalling pathway	2.80×10^{-16}
2. Huntington disease	6.53×10^{-11}
3. Angiogenesis	7.68×10^{-11}
4. PDGF signalling pathway	3.55×10^{-9}